

IN THE CLAIMS:

Claims 1-10 (canceled)

Claim 11 (previously presented) A process comprising
mixing organic waste, one or more coal combustion by-products, and one or more
alkaline additives to form an organic waste/coal combustion by-products/alkaline additive
by-product mixture;
drying said organic waste/coal combustion by-products/alkaline additive by-product
mixture with heat, causing ammonia to be liberated from said organic waste; and
introducing said liberated ammonia into a coal burner of a coal burning power plant.

Claim 12 (previously presented) The process of claim 11, wherein the heat for said
drying includes waste heat from said coal burning power plant.

Claim 13 (previously presented) The process of claim 11, wherein said drying comprises
drying the organic waste/coal combustion by-products/alkaline additive by-product mixture
to at least 50% solids.

Claim 14 (previously presented) The process of claim 11, wherein said drying comprises
drying the organic waste/coal combustion by-products/alkaline additive by-product mixture
to at least 75% solids.

Claim 15 (previously presented) The process of claim 11, further comprising reacting
scavenged exhaust gases from the power plant with at least one reactive material so as to
decrease the amount of pollutant gases in said exhaust gases.

Claim 16 (previously presented) The process of claim 15, wherein said reactive material
comprises $\text{Ca}(\text{OH})_2$.

Claim 17 (previously presented) The process of claim 11, further comprising reacting scavenged exhaust gases from the power plant with at least one reactive material so as to reduce CO₂ emissions from the power plant.

Claim 18 (previously presented) The process of claim 11, further comprising reacting scavenged exhaust gases from the power plant with at least one reactive material so as to reduce SO₂ and SO₃ emissions from the power plant.

Claims 19-34 (canceled)

Claim 35 (previously presented) A process comprising
mixing organic waste with one or more coal combustion by-products to form an organic waste-coal combustion by-product mixture;
drying with heat the organic waste-coal combustion by-product mixture to at least 50% solids forming a dried organic waste-coal combustion by-product mixture and causing ammonia to be liberated from said organic waste; and
introducing said liberated ammonia into a coal burner of a coal burning power plant.

Claim 36 (previously presented) The process of claim 35, wherein the organic waste-coal combustion by-product mixture has a pH of at least 9.5.

Claim 37 (previously presented) The process of claim 35, wherein said mixing further includes mixing lime with the organic waste and coal combustion by-products.

Claim 38 (previously presented) The process of claim 35, wherein said organic waste comprises waste selected from the group consisting of sewage sludges, animal manures, pulp and paper waste, fermentation waste, food waste, paper and cardboard, other industrial organic waste, and mixtures thereof.

Claim 39 (previously presented) The process of claim 35, wherein said coal combustion by-products comprise at least one by-product selected from the group consisting of fly ash, fluidized bed ash, flue gas desulfurization by-products, lime, calcium hydroxide, calcium carbonate, and mixtures thereof.

Claim 40 (previously presented) The process of claim 35, wherein drying takes place in at least one dryer.

Claim 41 (previously presented) The process of claim 40, wherein said dryer is selected from the group consisting of direct concurrent flow dryers, horizontal single, double and triple pass indirect dryers, and vertical counter flow rotating disk indirect dryers.

Claim 42 (previously presented) The process of claim 35, wherein said drying is conducted using a direct dryer.

Claim 43 (previously presented) The process of claim 35, wherein said drying is conducted using an indirect dryer.

Claim 44 (previously presented) The process of claim 35, wherein the heat for said drying includes waste heat from said coal burning power plant.

Claim 45 (previously presented) The process of claim 35, wherein said drying comprises drying the organic waste-coal combustion by-product mixture to at least 75% solids.

Claim 46 (previously presented) The process of claim 35, wherein when said coal combustion by-product comprises an alkaline mineral by-product, the drying step produces a further by-product.

Claim 47 (previously presented) The process of claim 35, further comprising reacting scavenged exhaust gases from said drying with at least one reactive material to decrease the amount of CO₂, SO₂ and SO₃ in said exhaust gases and thereby decrease emissions from the drying.

Claim 48 (previously presented) The process of claim 47, wherein said reactive material comprises Ca(OH)₂.

Claim 49 (previously presented) The process of claim 35, further comprising mixing the dried organic waste-coal combustion by-product mixture with coal.

Claim 50 (previously presented) The process of claim 49, wherein the coal is pulverized coal.

Claim 51 (previously presented) The process of claim 49, further comprising feeding the mixture formed by mixing the by-product with coal into said coal burner.

Claims 52-58 (canceled)

Claim 59 (currently amended) A process comprising
mixing organic waste with one or more coal combustion by-products to form an organic waste-coal combustion by-product mixture;
drying the organic waste-coal combustion by-product mixture to at least 50% solids forming a dried organic waste-coal combustion by-product ~~mixture~~ mixture;
combining the organic waste-coal combustion by-product with mixture with coal; and
feeding the organic waste-coal combustion by-product mixture and coal into a coal burner of a coal burning power plant.

Claim 60 (previously presented) The process of claim 59, wherein the coal is pulverized coal.

Claim 61 (previously presented) The process of claim 59, wherein said mixing further includes liberating ammonia from the organic waste and introducing the ammonia into the coal burner.

Claims 62-63 (canceled)

Claim 64 (previously presented) A system comprising
a coal burner of a coal burning power plant;
a coal feed supplying coal to said coal burner; and
an ammonia feed to said coal burner comprising ammonia liberated from organic waste upon drying a mixture of organic waste and one or more coal combustion by-products.

Claim 65 (previously presented) The system of claim 64, wherein the coal feed comprises coal and a dried mixture of organic waste and coal combustion by-product.

Claim 66 (previously presented) The system of claim 65, wherein said coal is pulverized coal.

Claim 67 (previously presented) The system of claim 65, wherein said coal and said dried mixture of organic waste and coal combustion by-product are mixed and then pulverized.

Claims 68-71 (canceled)

Claim 72 (previously presented) A system comprising
a coal burner of a coal burning power plant;

an ammonia feed to said coal burner comprising ammonia liberated from organic waste upon drying a mixture of organic waste and coal combustion by-products; and
a coal feed supplying coal to said coal burner, which coal feed comprises coal and the dried mixture of organic waste and coal combustion by-product.

Claims 73-74 (canceled)

Claim 75 (previously presented) A system comprising
a coal burner of a coal burning power plant;
a coal feed supplying coal and a mixture of organic waste, one or more coal combustion by-products and one or more alkaline additives to said coal burner, wherein said coal and said mixture of organic waste, one or more coal combustion by-products and one or more alkaline additives are mixed and then pulverized; and
an ammonia feed to said coal burner comprising ammonia liberated from organic waste upon mixing organic waste, one or more coal combustion by-products and one or more alkaline additives.

Claim 76 (previously presented) A system comprising
a coal burner of a coal burning power plant; and
a feed of coal and a mixture of organic waste, one or more coal combustion by-products and one or more alkaline additives, wherein said coal and said mixture of organic waste, coal combustion by-products and one or more alkaline additives are mixed and then pulverized.

Claim 77 (previously presented) A system comprising
a coal burner of a coal burning power plant; and

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a feed of coal and a mixture of organic waste-coal combustion by-products to said coal burner, wherein said coal and said mixture of organic waste-coal combustion by-products are mixed and then pulverized.
